

## DATA SHEET

**CELL LINE DESIGNATION**  
**ORIGIN (PARENTAL CELL)**  
**GENE INTRODUCED**  
**ENZYME INTRODUCED:**

Phosphodiesterase **4A** cell line (CB-81200-105)  
CHO-K1-CNG-cells (CB-81300-100)  
Genbank Locus ID 5141  
Human phosphodiesterase 4A (NCBI protein )

### USAGE

- cAMP assay for recombinant human phosphodiesterase 4A ( PDE4A).
- CHO-K1-CNG-cells (CB-81300-100) are used as a negative control.

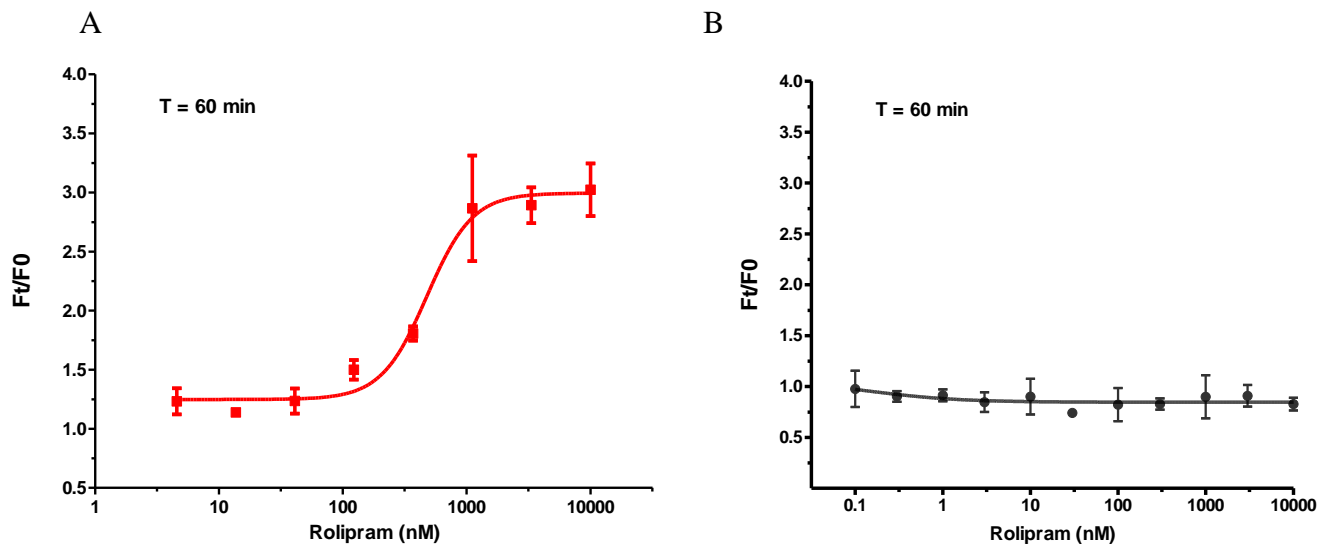
### QUALITY CONTROL

1. This cell line has been tested negative for *Mycoplasma sp.*
2. This cell line has been tested positive for PDE4A specific response.
3. Surviving rate: More than 2.5 million/vial on the second day after thawing.
4. The receptor specific activity is stable for 10 weeks continuous passage.

### CELL CULTURE CONDITION

1. Dulbecco's Modified Eagle's Medium/Nutrient Mixture F-12 Ham-10%FBS supplemented with 250 µg/ml G418, 1 µg/ml Puromycin and 5 µg/ml blasticidin.
2. Freezing medium: 10% DMSO, 90% complete cell culture medium

### DATA EXAMPLE



**Figure 1. Response of ACTOne cAMP-PDE4A cell line & parental cell line to Rolipram**

ACTOne cAMP-PDE4A cells and parental cells (CB-81300-100) were plated overnight in 20 µl culture medium on a 384 well microplate. The next day, cells were dye-loaded with 20 µl/well of ACTOne membrane potential dye. After 2 hour of incubation at room temperature, baseline was recorded using a FlexStation (Molecular Devices) (F0). 10 µl of PDE inhibitors at various concentrations were added to the cell plate, and the data was recorded 60 minutes (Ft) after drug addition. Dose response curves were generated by Prism.

- A. Dose response curve of Rolipram in ACTOne cAMP-PDE4A cell line. IC50 = 470 nM in the presence of 3 µM of Forskolin**
- B. Parental cells do not respond to Rolipram in the presence of 3 µM of Forskolin**